

LEGEND

EXISTING SURFACE MOUNTED 3P, 4W. PANELBOARD
(L-120/208V; H-277/480V)

EXISTING RECESSED MOUNTED 3P, 4W. PANELBOARD
(L-120/208V; H-277/480V)

FUSED DISCONNECT SWITCH

EXISTING INCANDESCENT LIGHTING FIXTURES

EXPOSED CONDUIT

EXISTING CONDUIT,
3/4" U.O.N.

EXISTING WIRING
AND/OR CONDUIT TO
BE REMOVED. 3/4" U.O.N.

CONDUIT UP

CONDUIT DOWN

CIRCUIT BREAKER

METAL JUNCTION BOX
U.O.N. SIZE: 4"x4"x2 1/8"

EXISTING SWITCH

EXISTING RECEPTACLE. 3 = CKT. NO.

RECEPTACLE, ISOLATED GROUND TYPE 125V, 20A, GROUNDING TYPE.
'Q' DENOTES QUAD - 2 DUPLEX IG TYPE RECEPTACLES. 2 = CKT. NO.
HUBBELL CAT. NO. 1G5362 OR APPROVED EQUAL

TELEPHONE OUTLET

PHASE

SINGLE POLE, TWO POLE, THREE POLE

NUMERAL DESIGNATES NUMBER OF
SINGLE CONDUCTOR WIRES

HATCH MARKS DENOTE NUMBER OF
1/C #12 WIRES. NO HATCH MARKS DENOTE
2-1/C #12 AND 1-1/C #12G. WIRES U.O.N.
HATCH MARKS DO NOT INDICATE GROUND WIRES.

ABBREVIATIONS

A	AMPERE
AC	ALTERNATING CURRENT
AF	AMPERE FRAME
AFF	ABOVE FINISHED FLOOR
APPROX.	APPROXIMATE
AT	AMPERE TRIP
AWG	AMERICAN WIRE GAUGE
BD	BOARD
BLDG.	BUILDING
BLK	BLACK
C	CONDUIT
CAT.	CATALOG
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CPU	CENTRAL PROCESSING UNIT
DC	DIRECT CURRENT
DISC.	DISCONNECT
DISTR.	DISTRIBUTION
DWG	DRAWING
ELEV.	ELEVATION
EMER.	EMERGENCY
EQUIP.	EQUIPMENT
EX.	EXISTING
FACP	FIRE ALARM CONTROL PANEL
FCC	FIRE COMMAND CENTER
FCO	FUSE CUT OUT
FMC	FLEXIBLE METAL CONDUIT
G	GROUND
GP	GENERAL PURPOSE
GRN	GREEN
GSC	GALVANIZED STEEL CONDUIT
HTG.	HEATING
IG	ISOLATED GROUND
KVA	KILO VOLT AMPERES
JB	JUNCTION BOX
LTG.	LIGHTING
N	NEUTRAL
NCC	NETWORK COMMAND CENTER
NEC.	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NIC	NOT IN CONTRACT
NO.	NUMBER
NTS	NOT TO SCALE
OAE	OR APPROVED EQUAL
OD	OUTSIDE DIAMETER
OC	ON CENTER
P	POLE
PB	PULLBOX
PNLBD	PANELBOARD
Q	QUAD
QTY	QUANTITY
RM	ROOM
SS	STAINLESS STEEL
SW.	SWITCH
TTB	TELEPHONE TERMINAL BOARD
TEL.	TELEPHONE
TRANSF.	TRANSFORMER
TYP.	TYPICAL
UL	UNDERWRITERS LABORATORY
U.O.N.	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTIBLE POWER SUPPLY
V.	VOLT
W	WIRE
W/	WITH
WHT	WHITE

GENERAL NOTES:

1. ALL CONDUIT SHALL BE RIGID GALVANIZED STEEL, U.O.N.
2. ALL WIRE SHALL BE NEC TYPE "XHHW-VW-1", U.O.N. SEE NOTE 8.
3. PROVIDE AND INSTALL ALL HARDWARE REQUIRED TO MAKE A COMPLETE AND CONTINUOUS GROUND SYSTEM. ALL CONDUIT RUNS INSTALLED SHALL INCLUDE AN INSULATED GREEN GROUND WIRE WHICH SHALL BE BONDED IN ALL ENCLOSURES.
4. ALL MOUNTING HARDWARE INCLUDING BRACKETS, BOLTS, NUTS, RODS, ETC. SHALL BE GALVANIZED STEEL. ANCHOR BOLTS SHALL BE THREADED RODS SET IN EPOXY, RAWL "FOIL-FAST" EPOXY AND RODS, OR APPROVED EQUAL.
5. ALL PENETRATIONS, CHOPPING OR DRILLING SHALL BE COORDINATED THROUGH THE ENGINEER. IF CORE DRILLING OR CHOPPING IS NECESSARY. SUBMIT THE EXACT CORE DRILLING OR CHOPPING LOCATION TO THE ENGINEER FOR APPROVAL. DO NOT CORE DRILL OR CHOP ANYWHERE PRIOR TO OBTAINING "DRILLING PERMIT" IN WRITING FROM THE ENGINEER. CONTRACTOR SHALL TAKE EVERY PRECAUTION TO ENSURE THAT NO REBARS SHALL BE CUT DURING CHOPPING OR DRILLING OF CONCRETE.
6. U.O.N. ON PLANS & SECTIONS HEAVY LINES DENOTE EQUIPMENT, CONDUIT, WIRING, ETC., TO BE PROVIDED AND INSTALLED UNDER THIS CONTRACT. ALL LIGHT LINES ARE EXISTING EQUIPMENT, CONDUIT, WIRING, ETC. TO REMAIN.
7. ALL CONDUIT PENETRATIONS THROUGH FIRE RATED WALLS AND FLOORS SHALL BE FIREPROOFED IN ACCORDANCE WITH NFPA BY THE CONTRACTOR. THIS INCLUDES ALL STAIRWAY ENCLOSURE WALLS, CONCRETE SLABS BETWEEN FLOORS, ETC.
8. WIRING BETWEEN NCC AND FACP (MXLV, CABINET #1, NIM-1R): PYROTRONICS PART No. 555-193085, CABLE ASSEMBLY WITH CONNECTOR(NCC END). PULL CABLE FROM FCC CONSOLE TO FACP. CONTRACTOR SHALL PULL CABLE TO MXLV CABINET No.1 AND SHAPE, LABEL, TEST AND CONNECT WIRING TO TERMINAL BOARD #3.
9. ALL JUNCTION BOXES AND RECEPTACLE BOXES WITHIN CONSOLE SHALL BE MOUNTED ON CONSOLE STRUCTURAL FRAMING IN APPROXIMATE LOCATIONS SHOWN ON THE DRAWINGS. COORDINATE ACTUAL LOCATION AND MOUNTING WITH EQUIPMENT LOCATION AND CONSOLE STRUCTURE.
10. ALL CIRCUITS FEEDING ELECTRONIC EQUIPMENT SHALL BE PROVIDED WITH 2 NEUTRAL CONDUCTORS. THIS SECOND NEUTRAL IS REFLECTED IN THE WIRE COUNTS ON THE DRAWINGS.

THE PORT AUTHORITY
OF NY & NJ



ORIGINAL SIGNED AND SEALED BY: SOLOMON COHEN
NEW YORK PROFESSIONAL ENGINEER: #4048459

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No.	Date	Revision	Approved
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Engineering Department
Design Division

The World Trade
Center

Title

**FIRE COMMAND
CENTERS**

ELECTRICAL

**GENERAL NOTES,
LEGEND AND
ABBREVIATIONS**

This drawing subject to conditions in contract.
All inventions, ideas, designs and methods
herein are reserved to Port Authority and
may not be used without its written consent.

W.F.	H.A.S.	S.C.
Task Leader	Drawn by	Checked By

Date
05/24/96

Scale
NONE

Contract Number
WTC-861.089

Drawing Number
E-1

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT
COPY OF ONE OF THE CONTRACT DRAWINGS CON-
STITUTING A PART OF CONTRACT NO. **WTC-861.089**
IN THE FORM IN WHICH SAID DRAWINGS EXISTED AT
THE TIME THE SAID CONTRACT WAS EXECUTED BY
THE PARTIES.

DATE: **9/9/96** **BAO**
SPEC. WRITER
DATE: **9/24/96** **Wesler-Cohen**
ENGINEER OF DESIGN